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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,249	07/08/2003	Edward L. Rapp	02280.003720.	8220
5514 7590 08/10/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
			EXAMINER PRATT, HELEN F	
			ART UNIT 1761	PAPER NUMBER
			MAIL DATE 08/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/615,249	Applicant(s) RAPP ET AL.	
	Examiner Helen F. Pratt	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The finality of the last office action has been removed.

Double Patenting

The terminal disclaimer has been received and approved.

Claim Rejections - 35 USC § 112

Claims 1-4, 6-8, 10-24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for 1 to about 4.5 g of fortification components, does not reasonably provide enablement for 1 to about 4.5 g of vitamins and minerals. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-8, 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. (Kelly, 4,055,669) in view of Froseth et al. (6,592,915) and Rombauer et al., p. 708.

Kelly et al. disclose making a binder composition as in claim 1 of fat, sodium caseinate (protein) and milk solids, and sugar to make a homogenous mixture, to which sensitive components such as vitamins and minerals, emulsifiers and colors are added at a temperature, and within a degree of mixing in a mixer that will not crush the particles as in claims 4, and 8 (col. 5, lines 54-66, col. 6, lines 29-60). The reference discloses that the blending is a critical operation that was done at temperatures from 100 to 140 F. and limited to the extent necessary to wet the added cereal particles.

The protein powder is sodium caseinate, which has been rolled with other ingredients to the size of 50 microns as in claims 6 and 10. The protein powders would have had to be about the claimed particle size of at least 35 microns since all the ingredients are 50 microns (Kelly, col. 6, lines 38-60).

Claims 1-3 differ from the reference to Kelly in the particular hedonic score, (claim 1), in the confidence level of claim 2 and the consumer acceptability hedonic score of claim 3. The hedonic score as in claim 1 of at least 5.2 is shown because the composition of Kelly can be a bar and does provide energy and nothing is seen that the bar would not have the claimed hedonic value (abstract). Also, Kelly discloses that processes that improve the mean hedonic score of the energy bar as disclosed in Applicants' specification on page 4, 0015. The fortification ingredients as in step b are placed strategically in the binder (col. 5, lines 40-43). In this way, the vitamins and minerals are allowed to be found throughout the composition, and not in one place where they might taste strong or gritty, depending on the vitamin or mineral. Also, a fat-carbohydrate matrix is provided by combining fat, and sugar to make the binder

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(energy bar matrix), as in step d, proteins powders with a particle size distribution of at least 30% of the protein powder with a mean particle size of at least 35 microns is shown, as the roll mill reduces the particles to about 50 microns (col. 6, lines 30-60. Last, as in step A, a process sensitive ingredient such as cereal is operated at a low speed at a critical temperature and with limited mixing (col. 5, lines 55-65).

A confidence level of 60% is seen to have been shown as it would inherently have this value since the product is an energy bar (abstract) as in claim 2 and acceptability since it is an energy bar and would inherently have this consumer acceptability as in claim 3 absent a showing to the contrary. As all the criteria for improving the hedonic score have been met by Kelly et al., the hedonic scores and confidence level was improved (page 7, 0026). Paragraph 0026 states that the hedonic score can be improved by particular processing procedures. All 4 have been disclosed above when only one is required. Therefore, it would have been obvious to make a food bar containing the claimed ingredients with the same hedonic scores and confidence levels absent a showing to the contrary since the claimed ingredients and amounts or amounts close to the required ones have been shown, and the processing parameters for improving the hedonic score have been disclosed.

This composition would make a chewy energy bar with an acceptability of at least 4.9 due to the use of the claimed ingredients as in claim 7 (Kelly, col. 6, lines 29-60).

Claims 1-13, 18-20 also require that the compositions contain particular amounts of proteins, fat, and carbohydrates in a bar containing particular amounts of calories, particular serving size and moisture content. However, particular amounts, moisture

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content, calories and serving sizes are seen to have been within the skill of the ordinary worker. Claims 4, 8, 14, 21, 22 are also a product by process claims. The fact that the procedures of the reference are different than that of applicant is not a sufficient reason for allowing the product-by-process claims since the patentability of such claims is based upon the product formed and not the method by which it was produced. See *In re Thorpe* 227 USPQ 964. The burden is upon applicant to submit objective evidence to support their position as to the product-by-process claims. See *Ex parte Jungfer* 18 USPQ 2D 1796. Even if the claimed ingredients are not exactly as claimed, it would have been obvious to vary amounts and ingredients as in using various recipes as the function of each ingredient is known (*Froseth et al.* (col. 26, lines 49-56). Therefore, it would have been obvious to use particular amounts of ingredients, calories, serving sizes and moisture content in the claimed compositions.

The independent claims also require that particular ingredients are selected from the corresponding Markush grouping. However, the ingredients in each of the group seem to include any and all relevant types of protein fats and proteins and as in *In re Levin*, nothing new is seen in using known ingredients for their known functions. Attention is invited to *In re Levin*, 84 USPQ 232 and the cases cited therein, which are considered in point in the fact situation of the instant case, and wherein the Court stated on page 234 as follows:

This court has taken the position that new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention, merely

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because it is not disclosed that, in the constantly developing art of preparing food, no one else ever did the particular thing upon which the applicant asserts his right to a patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function. In re Benjamin D. White, 17 C.C.P.A (Patents) 956, 39 F.2d 974, 5 USPQ 267; In re Mason et al., 33 C.C.P.A. (Patents) 1144, 156 F.2d 189, 70 USPQ 221.

Claims 1 and 2 and other independent claims and dependent claims require slightly different amounts of ingredients. However, it is seen that it would have been within the skill of the ordinary worker to use particular amounts of known ingredients, absent a showing of unexpected results using the claimed amounts. See In re Thorpe, as above.

Therefore, it would have been obvious to use known ingredients in various amounts to make an energy bar and to vary known ingredients as shown in the reference to make it acceptable in taste and to use particular processing parameters to improve the hedonic score.

Further, Froseth et al. disclose as in claim 4 adding sensitive food ingredients to a binder (abstract and Fig. 5A and col. 4, lines 36-44, col. 14, lines 61-70). The reference discloses that flavors are added last to avoid adverse affects from too much heat (col. 13, lines 9-11). Nothing is seen that the degree of mixing affects the sensitive components. The reference is aware that various process parameters such as temperature affect the ingredients. The velocity of mixing is well known to affect

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ingredients, hence the settings on mixers of slow to fast. Therefore, it would have been obvious to make a composition in which the temperature and shear were controlled.

Claim 11 further requires that an energy bar matrix is made by "gently folding" or mixing a solid component into a syrup to make a energy bar matrix, and then mixing the matrix with a fat-carbohydrate matrix. However, this is a product by process limitation in a composition claim. At any rate, Rombauer et al. disclose, in the recipe Pfeffernusse, an energy matrix made of corn syrup which is combined with a solid component which is grated lemon rind, which is mixed into a fat-carbohydrate matrix, which is butter and sugar (page 708). The energy bar is seen to be lubricious since it contains fat. See In re Levin above. Therefore, it would have been obvious to make a composition with matrixes as shown by Rombauer et al. as required in the composition of Kelly et al.

Claim 12 further requires adding well-known types of candies, which contain fat and carbohydrates into the energy bar. However, nothing new is seen in adding a fat-carbohydrate mixture as in chocolate chip cookies or bars, which contain chocolate chips or in cookies which contain the large chocolate kiss (Rombauer, page 705, chocolate-chip drop cookies). Therefore, it would have been obvious to add candy inclusions into an energy bar matrix for their known function of adding more fat and sugar in a tasteful formulation.

Claim 13 further requires the addition of fortification ingredients. Kelly et al. disclose the addition of vitamins and minerals to the binder of that composition (col. 5, lines 40-51). Therefore, it would have been obvious to fortify as shown by Kelly et al.

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The limitations of claim 18 have been disclosed above by the above combination of references, which would give the hedonic gains as in claims 19 and 20. Therefore, it would have been obvious to make the composition by processing sensitive ingredients as shown by Kelly et al., and strategically positioning functional ingredients as shown by Kelly and to use a fat carbohydrate matrix as disclosed by Rombauer et al. in the process of Kelly et al. if one wanted to add more fat as shown by adding the candy inclusions of Rombauer (chocolate chips) or the fat carbohydrate matrix as shown on page 708 of Rombauer et al.

Claims 14 further and 16 require that an energy bar matrix is made by mixing a solid component into a syrup to make an energy bar matrix, and then mixing the matrix with a fat-carbohydrate matrix. Rombauer et al. disclose, in the recipe Pfeffernusse, an energy matrix made of corn syrup which is combined with a solid component, grated lemon rind, which is mixed into a fat-carbohydrate matrix (butter and sugar)(page 708). The composition is considered to have a lubricious mouth feel since the claimed ingredients are used. The composition is considered to be an energy bar, since it is well known that carbohydrates such as corn syrup provides quick energy. Fat also is the storage form of carbohydrates and provides energy. Therefore, it would have been obvious to use the method of Rombauer in the process of the combined references in order to make an energy bar in order to show that it is known to mix a syrup with a fat-carbohydrate mix.

Claims 14-17 further require particular amounts of ingredients, calories and moisture content and serving size. However, In re Thorpe applies as above. Therefore,

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it would have been obvious to use particular amounts, calories and moisture contents and serving size to make an energy bar. The composition is considered to have the claimed hedonic score as in claims 15 and 17 as the composition has been shown.

Claim 21 further requires a particular fat to carbohydrate ratio. However, this ratio is so large, that it is seen that it would have been within the skill of the ordinary worker to vary the ratio depending on whether a low-calorie or a less sweet bar is required. The further ingredients are well known food ingredients used in making food bars, and nothing unexpected as in *In re Levin* is seen in their use. Therefore, it would have been obvious to vary the amount of fat to carbohydrate ratio, in order to make a good tasting bar, or a low fat or sugar bar.

Claim 22 further requires a particular moisture content. No moisture content is found for Kelly. However, as no water is added to the composition and the composition contains the claimed ingredients, it is seen that the moisture content would have been within the claimed amount in Kelly. Froseth et al. disclose an *Aw* of from 0.35 to 0.55 which is seen to have been within the claimed range (col. 2, lines 60-70). Therefore, it would have been obvious to make a bar with the claimed moisture content as shown by Froseth et al. in the composition of Kelly et al.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above combined references as applied to claims 1-4, 6-8, 10-22 above, and further in view of Avera (3,615,590).

Avera discloses a nut butter with a particle size of 96 % which would pass through a US sieve of 200 mesh size which is 75 microns, which leaves less than 10% having a particle size of less than 75 microns (col. 2, lines 65-70). No patentable distinction is seen at this time in the sizes of less than 10% as most of the particle sizes are within the claimed range. Therefore, it would have been obvious to use a nut butter which contains plant protein in near the claimed amounts in the process of the combined references because the reference discloses that protein is known in the claimed amounts.

ARGUMENTS

Applicant's arguments with respect to claim 6-18-07 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 5-11-06 have been fully considered but they are not persuasive. Applicants argue that the composition as noted in the first Declaration of Rapp is to a good tasting energy bar, which is made by controlling certain factors such as temperature and shear, particle size of protein and a fat-carbohydrate matrix. As to temperature and shear, these are process limitations in a composition claim or in product by process claims. Applicants in their Declaration have not compared the closest prior art, but high and low shear. As to the 11 g. of fat as opposed to 8 g of fat, nothing unobvious is seen in using 2 grams less of fat, as it is known that fat contains a lot of calories, and to reduce the fat, is to reduce calories. As in In re Levin, no coaction of ingredients is seen to produce anything new.

As to the particle size of protein, nothing has been shown that the particle size of protein as in Kelly is not within the claimed size range. The reference discloses milk protein, i. e. sodium caseinate and dry milk which contain protein. Applicants' example 5 shows that it is the particle size of the protein is important. The burden is on applicants to show that the particle size of protein in Kelly would not have been within the claimed size because the patent office does not have the facilities to do so. Such a showing would indicate allowable subject matter if such could be determined to be in the 16 micron size range as in applicants Ex. 4.

No basis is seen for applicant's particular amounts of fortification components since the amounts were directed to at least 5 different fortificants, not just vitamins and minerals.

As to the carbohydrate fat matrix, this is not found in the composition claims, but in claim 14 which is a product by process claim in which the process is not given weight absent a showing of unexpected results. The use of a fat-carbohydrate mixture is so well known, that it barely needs a reference. This is known as "creaming", i. e. blending sugar and fat together, before adding other ingredients.

Applicants cite various differences in amounts, however, the references were used for what they teach as disclosed in the office action.

No temperature controlling of the temperature is seen in claim 14, but is seen in claim 18. But no actual temperature or shear is cited or what process sensitive ingredients are required that would have been affected. Certainly, one knows that

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temperature affects vitamins, such as vitamin C, and it would have been within the skill of the ordinary worker to process ingredients so they taste good.

As to claims 22-24, the references are used for what was disclosed in the office action. As to secondary considerations, the success of the energy bar is noted.

However, carefully combining ingredients and the use of known ingredients is seen as obvious. It is known that various products take years to develop. Certainly, good tasting candy bars are known. It cannot be determined at this time whether the reference to Kelly discloses the proper protein particle size. A showing by Applicant would help to determine this.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Keith Hendricks, can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Hp 8-6-07


HELEN PRATT
PRIMARY EXAMINER